```
PPPPPPPPPPPP        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
PPPPPPPPPPPP        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
PPPPPPPPPPPP        AAAAAAAAA        SSSSSSSSSSS  RRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
PPP          PPP   AAA       AAA   SSS           RRR        RRR        TTT        LLL
PPP          PPP   AAA       AAA   SSS           RRR        RRR        TTT        LLL
PPP          PPP   AAA       AAA   SSS           RRR        RRR        TTT        LLL
PPP          PPP   AAA       AAA   SSS           RRR        RRR        TTT        LLL
PPP          PPP   AAA       AAA   SSS           RRR        RRR        TTT        LLL
PPP          PPP   AAA       AAA   SSS           RRR        RRR        TTT        LLL
PPPPPPPPPPPP       AAA       AAA     SSSSSSSSS   RRRRRRRRRRR           TTT        LLL
PPPPPPPPPPPP       AAA       AAA     SSSSSSSSS   RRRRRRRRRRR           TTT        LLL
PPPPPPPPPPPP       AAA       AAA     SSSSSSSSS   RRRRRRRRRRR           TTT        LLL
PPP                AAAAAAAAAAAAAAA         SSS   RRR   RRR             TTT        LLL
PPP                AAAAAAAAAAAAAAA         SSS   RRR   RRR             TTT        LLL
PPP                AAAAAAAAAAAAAAA         SSS   RRR   RRR             TTT        LLL
PPP                AAA       AAA           SSS   RRR      RRR          TTT        LLL
PPP                AAA       AAA           SSS   RRR      RRR          TTT        LLL
PPP                AAA       AAA           SSS   RRR      RRR          TTT        LLL
PPP                AAA       AAA   SSSSSSSSSSS   RRR         RRR       TTT        LLLLLLLLLLLLLLL
PPP                AAA       AAA   SSSSSSSSSSS   RRR         RRR       TTT        LLLLLLLLLLLLLLL
PPP                AAA       AAA   SSSSSSSSSSS   RRR         RRR       TTT        LLLLLLLLLLLLLLL
```

```
PPPPPPPP      AAAAAA      SSSSSSSS  LL          IIIIII    NN      NN  EEEEEEEEEE  LL          IIIIII
PPPPPPPP      AAAAAA      SSSSSSSS  LL          IIIIII    NN      NN  EEEEEEEEEE  LL          IIIIII
PP      PP   AA    AA   SS        LL            II      NN      NN  EE          LL            II
PP      PP   AA    AA   SS        LL            II      NN      NN  EE          LL            II
PP      PP   AA    AA   SS        LL            II      NNNN    NN  EE          LL            II
PP      PP   AA    AA   SS        LL            II      NNNN    NN  EE          LL            II
PPPPPPPP     AA    AA     SSSSSS  LL            II      NN  NN  NN  EEEEEEEE    LL            II
PPPPPPPP     AA    AA     SSSSSS  LL            II      NN  NN  NN  EEEEEEEE    LL            II
PP           AAAAAAAAAA         SS LL            II      NN    NNNN  EE          LL            II
PP           AAAAAAAAAA         SS LL            II      NN    NNNN  EE          LL            II
PP           AA    AA           SS LL            II      NN      NN  EE          LL            II          ....
PP           AA    AA           SS LL            II      NN      NN  EE          LL            II          ....
PP           AA    AA   SSSSSSSS  LLLLLLLLLL    IIIIII    NN      NN  EEEEEEEEEE  LLLLLLLLLL    IIIIII      ....
PP           AA    AA   SSSSSSSS  LLLLLLLLLL    IIIIII    NN      NN  EEEEEEEEEE  LLLLLLLLLL    IIIIII      ....

LL             IIIIII     SSSSSSSS
LL             IIIIII     SSSSSSSS
LL               II     SS
LL               II     SS
LL               II     SS
LL               II     SS
LL               II       SSSSSS
LL               II       SSSSSS
LL               II             SS
LL               II             SS
LL               II             SS
LL               II             SS
LLLLLLLLLL     IIIIII     SSSSSSSS
LLLLLLLLLL     IIIIII     SSSSSSSS
```

```
;     1          0001  0 MODULE PAS$LINELIMIT2 ( %TITLE 'LINELIMIT procedure'
;     2          0002  0                    IDENT = '1-001'                    ! File: PASLINELI.B32 Edit: SBL1001
;     3          0003  0                    ) =
;     4          0004  1 BEGIN
;     5          0005  1 !
;     6          0006  1 !*****************************************************************************
;     7          0007  1 !*                                                                           *
;     8          0008  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
;     9          0009  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
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;    15          0015  1 !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY     *
;    16          0016  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY     *
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;    18          0018  1 !*                                                                           *
;    19          0019  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE     *
;    20          0020  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT     *
;    21          0021  1 !*  CORPORATION.                                                              *
;    22          0022  1 !*                                                                           *
;    23          0023  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS     *
;    24          0024  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
;    25          0025  1 !*                                                                           *
;    26          0026  1 !*                                                                           *
;    27          0027  1 !*****************************************************************************
;    28          0028  1 !
;    29          0029  1
;    30          0030  1 !++
;    31          0031  1 ! FACILITY:     Pascal Language Support
;    32          0032  1 !
;    33          0033  1 ! ABSTRACT:
;    34          0034  1 !
;    35          0035  1 !       This procedure implements the Pascal LINELIMIT procedure.
;    36          0036  1 !
;    37          0037  1 ! ENVIRONMENT:  User mode - AST reentrant
;    38          0038  1 !
;    39          0039  1 ! AUTHOR: Steven B. Lionel, CREATION DATE: 14-October-1981
;    40          0040  1 !
;    41          0041  1 ! MODIFIED BY:
;    42          0042  1 !
;    43          0043  1 ! 1-001 - Original.  SBL 14-October-1981
;    44          0044  1 !--
```

```
;    46          0045  1 %SBTTL 'Declarations'
;    47          0046  1 !
;    48          0047  1 ! PROLOGUE DEFINITIONS:
;    49          0048  1 !
;    50          0049  1
;    51          0050  1 REQUIRE 'RTLIN:PASPROLOG';                    ! Externals, linkages, PSECTs, structures
;    52          0114  1
;    53          0115  1 !
;    54          0116  1 ! TABLE OF CONTENTS:
;    55          0117  1 !
;    56          0118  1
;    57          0119  1 FORWARD ROUTINE
;    58          0120  1     PAS$LINELIMIT2: NOVALUE;                 ! Set linelimit for file
;    59          0121  1
;    60          0122  1 !
;    61          0123  1 ! MACROS:
;    62          0124  1 !
;    63          0125  1 !       NONE
;    64          0126  1 !
;    65          0127  1 ! EQUATED SYMBOLS:
;    66          0128  1 !
;    67          0129  1 !       NONE
;    68          0130  1 !
;    69          0131  1 ! FIELDS:
;    70          0132  1 !
;    71          0133  1 !       NONE
;    72          0134  1 !
;    73          0135  1 ! OWN STORAGE:
;    74          0136  1 !
;    75          0137  1 !       NONE
;    76          0138  1 !
```

```
;    78          0139  1 %SBTTL 'PAS$LINELIMIT2 - Set linelimit for file'
;    79          0140  1 GLOBAL ROUTINE PAS$LINELIMIT2 (                      ! Set linelimit for file
;    80          0141  1         PFV: REF $PAS$PFV_FILE_VARIABLE,             ! File variable
;    81          0142  1         LINELIMIT: REF VECTOR [1, LONG],             ! New linelimit
;    82          0143  1         ERROR                                        ! Error unwind address
;    83          0144  1     ) : NOVALUE =
;    84          0145  1
;    85          0146  1 !++
;    86          0147  1 ! FUNCTIONAL DESCRIPTION:
;    87          0148  1 !
;    88          0149  1 !       This procedure sets a new limit for the number of lines that may
;    89          0150  1 !       be written to the specified file.  For non-textfiles, each PUT
;    90          0151  1 !       is considered one line.
;    91          0152  1 !
;    92          0153  1 ! CALLING SEQUENCE:
;    93          0154  1 !
;    94          0155  1 !       CALL PAS$LINELIMIT2 (pfv.mr.r, linelimit.rl.r [, error.j.r])
;    95          0156  1 !
;    96          0157  1 ! FORMAL PARAMETERS:
;    97          0158  1 !
;    98          0159  1 !       PFV             - The Pascal File Variable (PFV) passed by reference.
;    99          0160  1 !                         The structure of the PFV is defined in PASPFV.REQ.
;   100          0161  1 !
;   101          0162  1 !       LINELIMIT       - The new linelimit for the file.  A signed longword
;   102          0163  1 !                         integer value.  A negative value denotes no limit.
;   103          0164  1 !
;   104          0165  1 !       ERROR           - Optional.  If specified, the address to unwind to
;   105          0166  1 !                         in case of an error.
;   106          0167  1 !
;   107          0168  1 ! IMPLICIT INPUTS:
;   108          0169  1 !
;   109          0170  1 !       NONE
;   110          0171  1 !
;   111          0172  1 ! IMPLICIT OUTPUTS:
;   112          0173  1 !
;   113          0174  1 !       FCB [FCB$L_LINELIMIT]
;   114          0175  1 !
;   115          0176  1 ! ROUTINE VALUE:
;   116          0177  1 !
;   117          0178  1 !       NONE
;   118          0179  1 !
;   119          0180  1 ! SIDE EFFECTS:
;   120          0181  1 !
;   121          0182  1 !       NONE
;   122          0183  1 !
;   123          0184  1 ! SIGNALLED ERRORS:
;   124          0185  1 !
;   125          0186  1 !       FILNOTOPE - file not open
;   126          0187  1 !
;   127          0188  1 !--
;   128          0189  1
;   129          0190  2     BEGIN
;   130          0191  2
;   131          0192  2     LOCAL
;   132          0193  2         FCB: REF $PAS$FCB_CONTROL_BLOCK,! File control block
;   133          0194  2         PFV_ADDR: VOLATILE,             ! Enable argument
;   134          0195  2         UNWIND_ACT: VOLATILE,           ! Enable argument
```

```
;  135          0196  2          ERROR_ADDR: VOLATILE;               ! Enable argument
;  136          0197  2
;  137          0198  2      BUILTIN
;  138          0199  2          ACTUALCOUNT;
;  139          0200  2
;  140          0201  2      ENABLE
;  141          0202  2          PAS$$IO_HANDLER (PFV_ADDR, UNWIND_ACT, ERROR_ADDR);     ! Enable error handler
;  142          0203  2
;  143          0204  2      IF ACTUALCOUNT () GEQU 3
;  144          0205  2      THEN
;  145          0206  2          ERROR_ADDR = .ERROR;                            ! Set unwind address
;  146          0207  2
;  147          0208  2      !+
;  148          0209  2      ! Set the enable argument for the PFV address.
;  149          0210  2      !-
;  150          0211  2
;  151          0212  2      PFV_ADDR = PFV [PFV$R_PFV];
;  152          0213  2
;  153          0214  2      !+
;  154          0215  2      ! Validate and lock the PFV.
;  155          0216  2      !-
;  156          0217  2
;  157          0218  2      PAS$$VALIDATE_PFV (PFV [PFV$R_PFV]; FCB);
;  158          0219  2
;  159          0220  2      !+
;  160          0221  2      ! Set unwind action to unlock file.
;  161          0222  2      !-
;  162          0223  2
;  163          0224  2      UNWIND_ACT = PAS$K_UNWIND_UNLOCK;
;  164          0225  2
;  165          0226  2      !+
;  166          0227  2      ! Resolve lazy lookahead and open INPUT or OUTPUT.
;  167          0228  2      !-
;  168          0229  2
;  169          0230  2      IF NOT .PFV [PFV$V_VALID]
;  170          0231  2      THEN
;  171          0232  2          PAS$$LOOK_AHEAD (PFV [PFV$R_PFV], FCB [FCB$R_FCB]; FCB);
;  172          0233  2
;  173          0234  2      !+
;  174          0235  2      ! Verify that file is open.
;  175          0236  2      !-
;  176          0237  2
;  177          0238  2      IF NOT .PFV [PFV$V_OPEN]    ! Not open
;  178          0239  2      THEN
;  179          0240  2          $PAS$IO_ERROR (PAS$_FILNOTOPE,0);
;  180          0241  2
;  181          0242  2      !+
;  182          0243  2      ! Set new linelimit.
;  183          0244  2      !-
;  184          0245  2
;  185          0246  2      FCB [FCB$L_LINELIMIT] = .LINELIMIT [0];
;  186          0247  2
;  187          0248  2      !+
;  188          0249  2      ! Indicate successful completion
;  189          0250  2      ! Unlock file and return.
;  190          0251  2      !-
;  191          0252  2
```

```
;  192          0253  2     FCB [FCB$L_STATUS] = 0;
;  193          0254  2     PFV [PFV$V_LOCK] = 0;
;  194          0255  2
;  195          0256  2     RETURN;
;  196          0257  2
;  197          0258  1     END;                                    ! End of routine PAS$LINELIMIT2


                                                                    .TITLE  PAS$LINELIMIT2 LINELIMIT procedure
                                                                    .IDENT  \1-001\

                                                                    .EXTRN  PAS$LINELIMIT2, PAS$$IO_HANDLER
                                                                    .EXTRN  PAS$$VALIDATE_PFV
                                                                    .EXTRN  PAS$$LOOK_AHEAD
                                                                    .EXTRN  PAS$$SIGNAL, PAS$K_FILNOTOPE

                                                                    .PSECT  _PAS$CODE,NOWRT,  SHR,  PIC,2

                                                 00CC 00000         .ENTRY  PAS$LINELIMIT2, Save R2,R3,R6,R7        ; 0140
                                          5E            08  C2 00002         SUBL2   #8, SP                          ;
                                                        7E  D4 00005         CLRL    ERROR_ADDR                      ; 0190
                                                  04    AE  7C 00007         CLRQ    UNWIND_ACT                      ;
                                          6D      0047  CF  DE 0000A         MOVAL   4$, (FP)                        ;
                                          03            6C  91 0000F         CMPB    (AP), #3                        ; 0204
                                                        04  1F 00012         BLSSU   1$                              ;
                                          6E        0C  AC  D0 00014         MOVL    ERROR, ERROR_ADDR               ; 0206
                                          56        04  AC  D0 00018 1$:     MOVL    PFV, R6                         ; 0212
                                    08    AE            56  D0 0001C         MOVL    R6, PFV_ADDR                    ;
                                       00000000G        00  16 00020         JSB     PAS$$VALIDATE_PFV               ; 0218
                                    04    AE            01  D0 00026         MOVL    #1, UNWIND_ACT                  ; 0224
                                          06      06    A6  E8 0002A         BLBS    6(R6), 2$                       ; 0230
                                       00000000G        00  16 0002E         JSB     PAS$$LOOK_AHEAD                 ; 0232
                                 0E       07    A6            05  E0 00034 2$:     BBS     #5, 7(R6), 3$           ; 0238
                                                              7E  D4 00039         CLRL    -(SP)                   ; 0240
                                          7E          00G   8F  9A 0003B         MOVZBL  #PAS$K_FILNOTOPE, -(SP)         ;
                                    00000000G         00    02  FB 0003F         CALLS   #2, PAS$$SIGNAL                 ;
                                                              04  00046         RET                                     ;
                                          E0    A7      08  BC  D0 00047 3$:     MOVL    @LINELIMIT, -32(FCB)    ; 0246
                                                        D4  A7  D4 0004C         CLRL    -44(FCB)                ; 0253
                                          07    A6      80  8F  8A 0004F         BICB2   #128, 7(R6)             ; 0254
                                                              04  00054         RET                             ; 0258
                                                        0000  00055 4$:     .WORD   Save nothing                    ; 0190
                                          50        08  AC  D0 00057         MOVL    8(AP), R0                       ;
                                          50        04  A0  D0 0005B         MOVL    4(R0), R0                       ;
                                                        F4  A0  9F 0005F         PUSHAB  ERROR_ADDR                      ;
                                                        F8  A0  9F 00062         PUSHAB  UNWIND_ACT                      ;
                                                        FC  A0  9F 00065         PUSHAB  PFV_ADDR                        ;
                                                            03  DD 00068         PUSHL   #3                              ;
                                                            5E  DD 0006A         PUSHL   SP                              ;
                                          7E            04  AC  7D 0006C         MOVQ    4(AP), -(SP)                    ;
                                    00000000G         00    03  FB 00070         CALLS   #3, PAS$$IO_HANDLER             ;
                                                              04  00077         RET                                     ;

; Routine Size:  120 bytes,    Routine Base:  _PAS$CODE + 0000

;  198          0259  1
```

```
;  199          0260  1 !<BLF/PAGE>
;  200          0261  1 END                                   ! End of module PAS$LINELIMIT2
;  201          0262  1
;  202          0263  0 ELUDOM



;                                  PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  _PAS$CODE                       120  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)


;                                Library Statistics
;
;                                          --------- Symbols ---------      Pages       Processing
;       File                               Total    Loaded   Percent       Mapped      Time
;
;  _$255$DUA28:[SYSLIB]STARLET.L32;1        9776         0         0          581        00:01.0
;  _$255$DUA28:[PASRTL.OBJ]PASLIB.L32;1      427        90        21           33        00:00.4



;                                     COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:PASLINELI/OBJ=OBJ$:PASLINELI MSRC$:PASLINELI/UPDATE=(ENH$:PASLINELI
;       )

; Size:         120 code + 0 data bytes
; Run Time:       00:04.8
; Elapsed Time:   00:20.1
; Lines/CPU Min:   3267
; Lexemes/CPU-Min:  9913
; Memory Used:  67 pages
; Compilation Complete
```